

MAMMALIAN GRAINYHEAD TRANSCRIPTION FACTORS**ABSTRACT**

The present invention provides mammalian homologs of the *Drosophila* Grainyhead (GRH) transcription factor, call MGR and means of identifying such proteins and their genes. Nucleic acid and protein sequences are provided for human and mouse MGR transcription factors. In addition mammalian isoforms of MGR including human MGR p49, human p70, mouse p70, mouse MGR p61, and human and mouse homologs of MGR, brother of mgr (BOM) and sister of mgr (SOM), are disclosed. Antibodies to and methods of using these identified MGR, BOM and SOM transcription factors are also provided. The present invention further provides medical assessment systems including drug evaluation systems comprising genetically modified animals.